## XXVI.—NOTES ON THE POND TERRAPIN (*GEOEMYDA T. TRIJUGA*) IN SALSETTE ISLAND.

During the early part of the monsoon, I obtained two female specimens of *G. t. trijuga* through Mr. H. Ali. Both specimens were caught at Andheri. This species is apparently common on the island, but is seldom seen on account of its nocturnal habits. During the rains they wander about much at night.

Both the specimens referred to I kept in captivity. During the early part of October, I cast one of them for the Museum. When opened it was found to contain numerous eggs, the largest of which were about 1.5 cm. in diameter and quite spherical. On the 20th of the same month, the surviving terrapin laid five eggs in her cage, early that morning. The five eggs were laid in fairly quick succession. The two largest measured 48 × 26 mm. each, the next in size 46 × 27 mm. and the remaining two 44 × 26 and 44 × 25 mm. respectively. These measurements agree fairly well with those given in the *F.B.I.* (new ed.) Reptilia, for the race *G. t. thermalis* from Ceylon.

The eggs are elliptic, narrowing down slightly towards the poles. Both the poles are equally domed. The shell is firm and calcarious, white, with a slight pinkish tinge.

With regard to food, I am of the opinion, that this species is entirely vegetarian. The captives, referred to, refused to take meat of any kind, but would always readily take such vegetable as tomatoes, and cucumbers (they were very partial to the latter), but would not eat pumpkins. They would occasionally eat boiled rice from the dog's plate.

These creatures appear to be very docile, never attempting to bite or to fight among themselves, though sometimes one would snap at the other over food. The two lived on amicable terms with a Star-shelled Tortoise (*Testudo elegans*) in the same cage.

The scent glands in this species are well known, and I can only confirm this. When very agitated these terrapins emit a very powerful and disagreeable stench—presumably a means of defence.

Bombay Natural History Society,

Bombay. C. McCANN.

*October* 25, 1936.

## XXVII.—NOTES ON THE BREEDING OF THE RAT-SNAKE OR DHAMAN (*ZAMENIS MUCOSUS*)

Col. F. Wall referring to the breeding of the Rat-Snake (*Z. mucosus*) in his interesting serial published in the *Journal* entitled, 'A Popular Treatise on the Common Snakes of India' (vol. xiii, p. 268), remarks that the periods of gestation and incubation are

unknown to him, yet he gives the periods of deposition of the eggs and hatching with fair accuracy.

On several occasions I have observed these snakes in copulation during the months of April, May and June. Specimens dissected in June and July have had eggs in the uterus. On the 11th August this year (1936) eleven eggs were taken a few inches under the soil. The number of eggs for this species as recorded by Col. Wall is between nine and fourteen. The eggs were in the shape of a long ellipse with both the poles equally domed; chalky white and non-adherent. (Wall: 'The eggs laid in adherent clusters and deposited, I believe, in holes in the earth. They are white, glossy and parchment-like, with the poles equally domed.') The largest egg measured 50 × 25 mm. and the smallest 43 × 24 mm.; the others were all in the neighbourhood of 46 × 26 mm. These measurements agree well with those recorded by Nicholson ($2'' \times 1\frac{1}{4}''$).

On opening one of the eggs I discovered that it contained an embryo about seven to ten days old. The remaining ten eggs I kept in a desiccator with a little water at the bottom, while the eggs rested on a tray above. At intervals I opened the eggs to get an embryological series. At first the egg shells were firm and quite taut, showing no indentations, but as development progressed the shell showed deep depressions here and there. On the 12th November I opened the last eggs that I had kept to hatch to establish the identity of the species. On this day the egg looked as though it was going bad, which was really the reason for my opening it. To my surprise, I discovered that it contained a nearly mature embryo, which would have come out in about four days to a week. Allowing ten days in the beginning and another seven days at the end this would give us an aggregate of 110 days (or three months and twenty days) as the incubation period.

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Bombay. C. McCANN.

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## XXVIII.—SNAKES' METHOD OF SWALLOWING PREY.

With reference to the remarks on the manner in which snakes swallow their prey in the very interesting article on the 'Snakes of Deolali' which appeared in the last number of the *Journal*, the following experience may be worth recording.

As I was passing a small pond some years ago, a large frog quite three and a half inches in length of head and body, leapt off the bank into the water and was instantly seized by the hindleg by a snake which had been lying in hiding behind a stone half in and half out of the pond. The snake was about two and a half feet long and of slender build, the head being little more